

8. (Original) The kit of Claim 6, wherein said tRNA of said tRNA/marker conjugate is a suppressor tRNA.

9. (Original) The kit of Claim 6, wherein said component of said protein synthesis system comprises ribosomes.

**AMENDMENTS TO THE SPECIFICATION
PURSUANT TO 37 C.F.R. § 1.121**

Page 94 Paragraph 1

A. Modification of aminoacylated tRNA with BODIPY-FL-SSE

To the above aminoacylated-tRNA solution, 2.5 μ l [(1)] of 1N NaHCO₃ was added (final conc. 50 mM, pH = 8.5) followed by 10 μ l [(1)] of 10 mM solution of BODIPY-FL-SSE (Molecular Probes) in water. The mixture was incubated for 10 min at 0°C and the reaction was quenched by the addition of lysine (final concentration = 100 mM). To the resulting solution 0.1 volume of 3 M NaOAc, pH = 5.0 was added and the modified tRNA was precipitated with 3 volumes of ethanol. Precipitate was dissolved in 50[(ml)] microliters of water and purified on Sephadex G-25 gel filtration column (0.5 X 5 cm) to remove any free fluorescent reagent, if present. The modified tRNA was stored frozen (-70°C) in small aliquots in order to avoid free-thaws.

Page 94 Paragraph 2

B. Modification of aminoacylated tRNA with BODIPY-FL-SE

To the above aminoacylated-tRNA solution, 2.5 μ l [(1)] of 1N NaHCO₃ (final conc. 50 mM, pH = 8.5) and 20 μ l [(1)] of DMSO was added followed by 10 μ l [(1)] of 10 mM solution of BODIPY-FL-SE (Molecular Probes) in DMSO. The mixture was incubated for 10 min at 0°C and the reaction was quenched by the addition of lysine (final concentration = 100 mM). To the resulting solution 0.1 volume of 3 M NaOAc, pH = 5.0 was added and the modified tRNA was precipitated with 3 volumes of ethanol. Precipitate was dissolved in 50 μ l[(ml)] of water and purified on Sephadex G-25 gel filtration column (0.5 X 5 cm) to remove any free fluorescent reagent, if present. The modified tRNA was stored frozen (-70°C) in small aliquots in order to avoid free-thaws.

Page 95 Paragraph 2

To the aminoacylated-tRNA solution described above, 2.5 μl [(1)] of 1N NaHCO_3 was added (final conc. 50 mM, pH = 8.5) followed by 10 μl [(1)] of 10 mM solution of sulfosuccinimidyl 7-amino-4-methylcoumarin-3-acetate (AMCA-sulfo-NHS; Pierce Chemicals) in water. The mixture was incubated for 10 min at 0°C and the reaction was quenched by the addition of lysine (final concentration = 100 mM). To the resulting solution 0.1 volume of 3 M NaOAc, pH = 5.0 was added and the modified tRNA was precipitated with 3 volumes of ethanol. Precipitate was dissolved in 50 microliters of water and purified on Sephadex G-25 gel filtration column (0.5 X 5 cm) to remove any free fluorescent reagent, if present. The modified tRNA was stored frozen (-70°C) in small aliquots in order to avoid free-thaws.

Page 95 Paragraph 3

To the above aminoacylated-tRNA solution, 2.5 μl [(1)] of 1N NaHCO_3 (final conc. 50 mM, pH = 8.5) and 20 μl [(1)] of DMSO was added followed by 10 μl [(1)] of 10 mM solution of succinimidyl 7-amino-methyl-amino-coumarin acetate (AMCA-NHS; Molecular Probes) in DMSO. The mixture was incubated for 10 min at 0°C and the reaction was quenched by the addition of lysine (final concentration = 100 mM). To the resulting solution 0.1 volume of 3 M NaOAc, pH = 5.0 was added and the modified tRNA was precipitated with 3 volumes of ethanol. Precipitate was dissolved in 50 microliter of water and purified on Sephadex G-25 gel filtration column (0.5 X 5 cm) to remove any free fluorescent reagent, if present. The modified tRNA was stored frozen (-70°C) in small aliquots in order to avoid free-thaws.